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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,256	03/26/2004	Olga E. Shmakova-Lindeman	7780-NES	8310
49459	7590	12/04/2007		
NALCO COMPANY 1601 W. DIEHL ROAD NAPERVILLE, IL 60563-1198			EXAMINER MOORE, MARGARET G	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			12/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/810,256

**Applicant(s)**

SHMAKOVA-LINDEMAN, OLGA E.

**Examiner**

Margaret G. Moore

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4 to 28 is/are pending in the application.
- 4a) Of the above claim(s) 22 to 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7 to 10, 12 to 14, 17 to 21 is/are rejected.
- 7) ☒ Claim(s) 4 to 6, 11, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

1. Applicants' response dated 9/24/07 has been entered. This overcomes the various rejections made in the previous office action. Upon an updated review of the prior art, the Examiner has discovered a new reference that teaches and/or suggests at least some of the claims previously indicated as being allowable. Since the rejection of these claims is not necessitated by applicants' amendment, this action cannot be made final. The Examiner apologizes for this unintentional delay in prosecution.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 17, 18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 59-122509, as interpreted by the English language translation.

JP 59-122509 (herein "the JP reference") teaches a methacrylic resin prepared by polymerizing methyl methacrylate, meeting (b), an acrylic acid ester prepared from an alcohol having 10 or more carbon atoms, meeting (a) and the "wherein" proviso, and an addition monomer, preferably styrene. Please see page 2 of the JP reference and, more generally, the entire teachings therein. Examples 4 and 5 prepare polymers that differ from that claimed only in that the long chain alkyl ester is a methacrylate rather than an acrylate. Since this methacrylate is used in the alternative with acrylate and the prior art teaches only two possibilities for this compound, one of ordinary skill in the art would at once envisage the subject matter within claim 1 from the teachings in the JP reference. In this manner the subject matter of claim 1 is anticipated by the prior art.

For claim 17, note page 8 which teaches solution polymerization. For claim 18, see also page 8, which teaches emulsion polymerization, as well as Example 4. Example 4 also shows a polymer content meeting claim 19. For claim 21, note that Example 5 prepares a liquid polymer that will meet this requirement.

4. Claims 2, 7 to 10, 12 to 14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 59, 122509.

For claim 2, this reference does not specifically teach molecular weight. Adjusting the molecular weight of the polymer in the JP reference would have been well within the skill of the ordinary artisan, particularly since the JP reference teaches, in one polymerization method, the partial polymerization of the reactants. See the top of page 9. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (doesn't require undue experimentation).

As an aside, the Examiner notes that she suspects that the polymer in Example 5 of the JP reference inherently falls within this claimed range but at this time she is not able to establish this. If applicants are able to determine the molecular weight of this polymer, the Examiner requests that applicants provide such information.

For claims 7, 12 and 13, note that Examples 4 and 5 use an amount of C<sub>10-30</sub> reactant meeting this range. See also page 6 which teaches a range of such an acrylate acid that overlaps with, and thus renders obvious, that claimed.

For claim 8, see the range on page 7 of the monomer (C) which overlaps with and thus renders obvious the selection of a styrene monomer within the claimed range.

For claim 14, see again Example 5 and note the teachings on page 5.

For claims 19 and 20, note that adjusting the amount of polymer in the solution polymerization method of the JP reference would have been obvious and within routine experimentation for one having ordinary skill in the art.

5. The remaining references are neither taught nor suggested by the prior art. The JP reference fails to teach or suggest a large amount of acrylic acid ester as found in claims 4, 5 and 15. Likewise this reference fails to teach or suggest the lesser amount of methacrylic acid ester as found in claim 6. Note that (B) in the JP reference embraces such smaller amounts of methacrylic acid, but only when (B) is an acrylic acid ester does this reference apply against the instant claims. This reference fails to teach or suggest the specific combination of reactants found in claims 11 and 16.

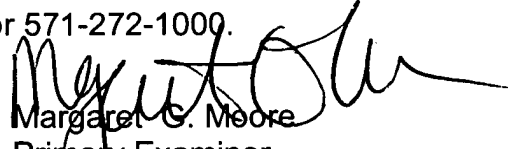
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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Margaret G. Moore  
Primary Examiner  
Art Unit 1796

mgm  
12/3/07